

Southeast Phytoplankton Monitoring Network Directions for Fashion a Phytoplankton

Objective: This activity covers organism structure and binomial taxonomy.

Materials:

- Set(s) of fashion cards (laminate for longer use)
- White paper
- Crayons or Colored Pencils
- English To Latin Dictionary
- A Creative Mind!

Procedure:

Creating Phytoplankton:

Hand out four cards to each student/group of students. If there are more students ten you have cards print additional activity sheets. When handing out cards make sure not to give two contradicting cards (example: centric vs. pennate). Each student/group will now draw a picture based on the cards they have recieved. Each card has a definition and example of the structure. These are to be used as guides, not to copy.

Binomial System of Taxonomy:

Each animal and plant has its own scientific name that is recognized by scientists in America, Europe, or anywhere else in the world. This binomial system of taxonomy dates back to the 1750s, when Swedish naturalist Carl von Linne (Latinized to Carolus Linneas) adopted Latin, the scholarly language of the day, to describe organisms.

Each organism is assigned a Genus name (capitalized) and a species name (lower case). Both names are usually italicized. Organisms with the same genus names are closely related (such as Canis for all dogs), while those with similar species names may share some common features, such as color or shape (as in rubrum for red).

By looking for the root meaning of the Latin names, students may deduce the characteristics of an organism. Or by using Latin words describing the characteristics of their "invented" organisms, students can name the new species they create.

Hints: Names can be based on:

- 1. people
- 2. region
- 3. shape/size
- 4. similarity to other species
- 5. defining characteristics

It's your students' choice. The goal is for your student to be creative and learn the different, and some time unique, characteristics of phytoplankton. This will help them identify the phytoplankton they see under the microscope. Each student/group should present their phytoplankton to the class and explain the name, characteristics, and possible purposes to the class. This will allow the students to learn various structures and Latin names while enjoying what their classmates have created.

